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May 22, 1978

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> Senator Gaylord Nelson United States Senate Washington, D.C. 20510

Dear Gaylord:

I am glad to see you are reopening a dialogue on the rights to inventions that derive from federally sponsored research.

My gravest concern is not unjust enrichment, which I think has been exaggerated. Rather, I do not believe the pursuit of proprietary gains to be the proper business of the university. The possibility of profit - especially when other funding is so tight - will be a distorting influence on open communication and on the pursuit of basic scholarship.

On the other hand, the need to protect development investment for the exploitation of inventions is absolutely sound, and essential to the nation's economy. Such investments are typically much larger than the costs of the original research, and are comparable to the expected "profits" - when there is a payoff.

It should not be so difficult to reconcile these objectives, using the Research Corporation as a model. Set up an accountable, not-for-profit national R&D Foundation, and vest all government owned patents in it. NRDF will then enter the market, at arms length, with licenses, etc., for the inventions it owns. The fees should first of all cover its operating expenses. Then it can use its profits and accumulated reserves to fund grants and contracts that will continue to further the practical applications of scientific discovery.

We do not have good institutions today at the interface of academic science and industrial technology, between the public and private sectors. At least in part, the proper allocation of proprietary rights is an irritating problem; and corporations have good reason to be leery of investing in R&D if they will be challenged and harassed just when their enterprise has paid off. So investment tends to dry up, or to flow to surer avenues of return, like advertising.

Many details would remain to be worked out, but I do offer a few comments:

1) The NRDF receipts should <u>not</u> revert to the federal treasury, but can remain in its revolving fund. In fact its initial funding could well come from a public bond issue secured <u>only</u> by its prospective profits.

This aggregation will sustain the visibility of the fruits of public investment in R&D. It will also permit more innovative approaches to responsible marketing of licenses, and to further R&D funding, than is possible from a government bureaucracy. Conversely, it should not receive annual appropriations.

- 2) Universities (primary grantees) should not share in the license fees except to the extent of their cost-sharing in the research that led to an invention. This should be assumed to be 10% for routine cases, subject to more detailed adjudications where significant amounts are involved.
- 3) Individuals should not, in principle, be rewarded for the results of work for which they were already receiving an academic salary. I have already indicated how this can distort their academic functions: However, the institution's share, under (2) should be disposed of according to its own lights: its relationship to faculty should not be monitored by outside agencies or government.

The viability of NRDF will be an indirect acknowledgment of the creative contribution of individuals to the national effort in R&D. Nor should individuals be hindered in their private arrangements, for the fruits of time and energy for which they were not on salary, and which are outside their normal academic duties.

You will recognize that my views are not shared by the majority of university people, faculty or administrators. The financial and regulatory stresses on our private institutions are threatening their future existence. But patent-seeking is an inappropriate answer to these financial dilemmas.

Yours sincerely,

Joshua Lederberg, Ph.D. Professor and Chairman of Genetics